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Radulomycetopsis (*Agaricomycetes*), a new corticioid genus from India

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Abstract — A new corticioid genus, *Radulomycetopsis*, is described for the new species, *R. cystidiata*, from West Kameng in Arunachal Pradesh.

Key words — Eastern Himalaya, Bomdila, angiosperm host

While conducting a fungal foray in Bomdila in West Kameng of Arunachal Pradesh, India, Dhingra made a collection on decaying angiospermous branches. The macroscopic and microscopic characters were compared with similar genera in *Corticiaceae* (Rattan 1977, Thind & Dhingra 1985, Eriksson et al. 1981, Hjortstam et al. 1987) but could not be assigned to any already known, hence the description of a new genus. Morphological traits show similarities with *Radulomyces*.

Radulomycetopsis Dhingra, Priyanka & J. Kaur, **gen. nov.**

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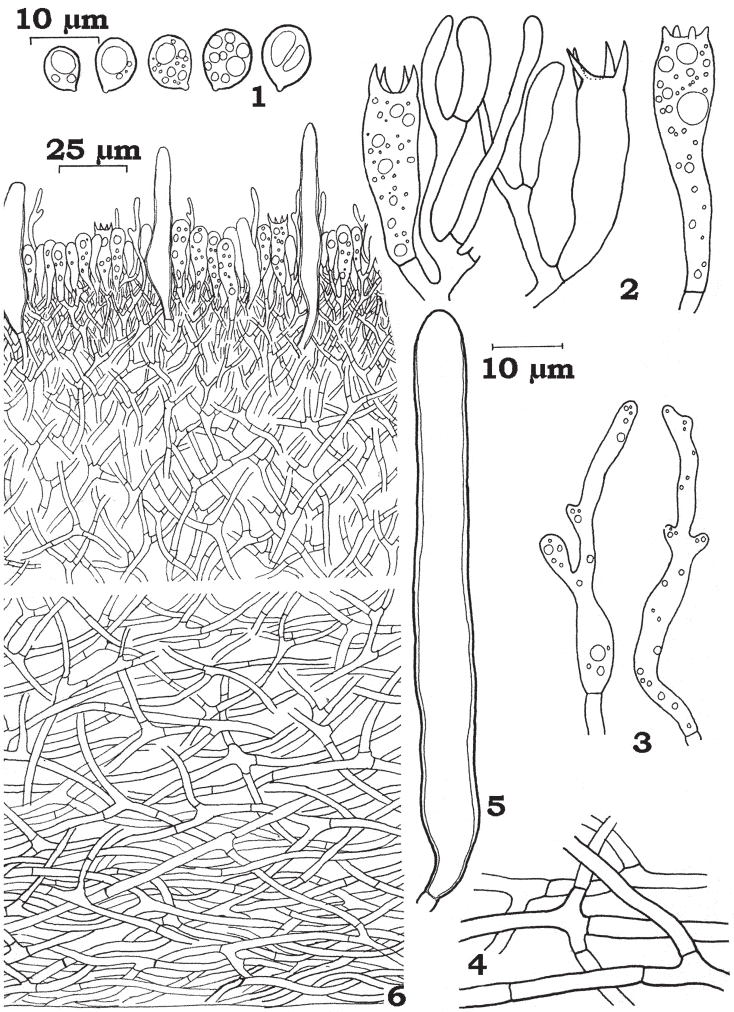
Differs from *Radulomyces* in basidiocarps that are dark-colored, lack clamp connections, and possess cystidia.

Type Species: *Radulomycetopsis cystidiata* Dhingra, Priyanka & J. Kaur

Etymology: The name of the genus is based on the resemblance with genus *Radulomyces*.

Basidiocarp resupinate, adnate, effused, membranous-ceraceous; hymenial surface smooth to slightly tuberculate, orange to brownish orange to reddish brown; margins fibrillose, concolorous but paler; hyphal system monomitic; generative hyphae branched at wide angles, without clamps, basal hyphae covered with a thick sheath of brownish red matter, which dissolves in 3% KOH; cystidia projecting, thin- to slightly thick-walled; simple to somewhat branched hyphoid structures present in the hymenium; basidia clavate to



Figs 1–6. *Radulomycetopsis cystidiata*: microscopic structures.
1. Basidiospores; 2. basidia; 3. hyphoid structures in the hymenium; 4. generative hyphae; 5. cystidium; 6. vertical section through basidiocarp.

subclavate, 4-sterigmate, without a basal clamp; basidiospores broadly ellipsoid to subglobose, smooth, thin- to slightly thick-walled, inamyloid, acyanophilous; both basidia and basidiospores rich in oil drops.

Remarks— *Radulomycetopsis* resembles *Radulomyces* in producing simple to somewhat branched hyphoid structures in the hymenium, similar basidia,

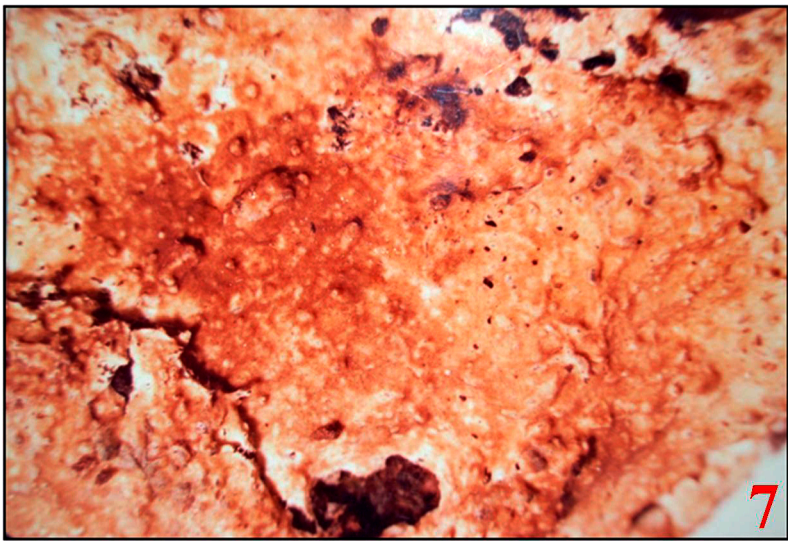


Fig. 7. *Radulomycetopsis cystidiata*: basidiocarp showing hymenial surface.

and broadly ellipsoid to subglobose basidiospores that are thin- to slightly thick-walled, non-amyloid, acyanophilous, and with oil rich protoplasm. *Radulomycetopsis* differs in having dark colored fruitbodies, hyphae without clamps, and presence of cystidia, a combination of features that supports an independent genus. A sample has been studied by Prof. Kurt Hjortstam, who supports the concept of a new genus.

Radulomycetopsis cystidiata Dhingra, Priyanka & J. Kaur, **sp. nov.**

MycoBank MB 560518 Figs 1–7

Differs from *Radulomyces confluens* by the absence of clamp connections and the presence of cystidia.

Type: India, Arunachal Pradesh: West Kameng, Bombila, on decaying angiospermous branches, 29 August 1981, Dhingra 19767 (PAN, **holotype**).

Etymology: The epithet refers to the presence of cystidia.

Basidiocarp resupinate, adnate, effused, up to 430 µm thick in section, membranous-ceraceous; hymenial surface smooth to slightly tuberculate, orange to brownish orange to reddish brown when fresh, becoming orange gray to grayish orange to brownish orange on drying; margins thinning, irregular in outline, fibrillose. Hyphal system monomitic; generative hyphae up to 3 µm wide, thin-walled, branched at wide angles, septate, without clamps; basal zone composed of sparsely branched hyphae, running almost parallel to the substrate, covered with some brownish-red matter which dissolves in 3%

KOH, followed by a zone of comparatively more richly branched, loosely and irregularly interwoven hyphae which merge into the hymenial zone where the hyphae become vertical and much branched forming a dense texture. Cystidia 70.0–85.0 × 9.0–11.0 µm, cylindrical to sub cylindrical, thin- to somewhat thick-walled, projecting up to 50 µm out of the hymenium. Some simple to slightly branched hyphoid structures, are also observed in the hymenium. These are thin-walled, with oily contents, and look different from dendrohyphidia. Basidia 25.0–37.0 × 7.0–8.5 µm, clavate to subclavate, often constricted with oily contents, 4-sterigmate, with no basal clamp; sterigmata up to 7.0 µm long. Basidiospores 6.0–9.0 × 5–7.25 µm, broadly ellipsoid to subglobose, thin- to slightly thick-walled, inamyloid, acyanophilous, uniguttulate or with many oil drops.

Remarks—*Radulomycetopsis cystidiata* is similar to *Radulomyces confluens*, which is easily distinguished by the presence of clamp connections and absence of cystidia.

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